



# DRASTIC plastic

Many household containers are made with bisphenol A, which can cause disturbing health effects. With the many new and better alternatives, you can reduce your family's exposure to this toxic chemical. **By Nicola Mellare**

In October 2008, the Canadian government took the first steps to ban products containing the chemical bisphenol A (BPA), a common compound found in plastics, because of its adverse effects on human health. The North American National Toxicology Program, after examining 400 recent studies on the effects of BPA, identified "some concern for neural and behavioral effects in fetuses, infants, and children" and "some concern for exposure in these populations based on effects in the prostate gland, mammary gland, and an earlier age for puberty in females".

On March 13 this year, the US Senate proposed a bill banning the use of BPA and, in a pre-emptive strike, a number of department store chains stopped stocking infant products containing BPA. Six of the major baby-bottle manufacturers in the US have now switched to BPA-free plastics. Even more significantly, one of the major international chemical producers has declared it will no longer supply BPA to manufacturers for use in products designed for children under three years of age.

In Australia, the issue of BPA has received less attention and many suppliers of plastic goods don't even know what BPA is, let alone whether or not their products contain

it. Food Standards Australia and New Zealand (FSANZ) claims to have "a close eye" on research concerning the health risks of BPA and is monitoring the developments in Canada and the US. However, FSANZ's stance on BPA at present is based on a European Food Safety Authority (EFSA) study that set a "safe" limit for exposure to BPA and concluded that the amount of BPA we consume via plastic containers and canned foods is below that threshold.

To date, the official word on BPA in Australia is that the use of BPA in food packaging and drink containers "does not pose a significant health risk", despite a growing body of evidence to the contrary. Many Australians are still in the dark about BPA. So what is it? How does it affect health? Should we be avoiding products containing BPA and, if so, how do we identify them? These are all questions every parent should know the answers to.

## What is BPA?

BPA is an industrial chemical that has been widely used for the past 50 or 60 years, mainly as a component of plastics. It is also a key ingredient in the manufacture of epoxy resins. Plastics containing BPA are common

and the most widely used is polycarbonate. Polycarbonate plastic is a hard, clear, almost glass-like plastic widely used because of its strength and ability to withstand significant impact without shattering. Among its most common uses, the most concerning in terms of health risk is the production of infant feeding bottles and of re-useable food and drink containers. Aside from polycarbonate food containers, epoxy resins containing BPA are commonly used to line aluminium food and soft drink cans and it is sometimes used in the lining of baby formula containers.

What makes the use of BPA in food containers dangerous is its propensity to leach from the plastic containers into whatever food or drink is inside. The leaching is significantly increased if the plastic is scratched or heated. Evidence of BPA leaching into foods is clear and not disputed by the plastics or chemical industries. In 2003–2004, the US Center for Disease Control conducted a study involving 2517 people aged six and over. BPA was found in the urine of 92.6 per cent of participants.

## Water risk

Beware of water purifiers. Many of the jug-type, benchtop water purifiers are made with polycarbonate plastic and contain BPA. If you want to use a purifier, choose ceramic under-sink units or benchtop purifier/chillers that have stainless-steel bowls.